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APPLICATION NO.	FILING DATE	FIRST-NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,922	04/25/2001	Jeremy S. Cooper	2018.0070001	6528

26111 7590 06/22/2004

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EXAMINER

TO, BAOQUOC N

ART UNIT

PAPER NUMBER

2172

DATE MAILED: 06/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/840,922

Applicant(s)

COOPER, JEREMY S.

Examiner

Baoquoc N To

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-35 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 03/22/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-31 are pending in this application and claim 32-35 are newly added, claims 1-31 are amended in the amendment filed on 03/22/04. Claims 1-35 are pending in this application.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 03/22/04. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Response to Arguments

3. Applicant's arguments filed 03/22/04 have been fully considered but they are not persuasive.

The applicant argues "further more, even if the range in latitude and longitude of Ito could, for sake of argument, be construed as proximity parameters, Ito still would not each an encompassed predetermined position."

The examiner respectfully disagrees with the above argument. Ito suggests proximity searching using the range of longitudes and latitudes in the rectangular range wherein the rectangular range is the encompassed predetermined position (col. 4, lines 59-63).

The applicant argues "proximity parameter therefore, cannot teach calculating a set of latitudes and longitudes based on a proximity parameter."

The examiner respectfully disagrees with the applicant argument. As previously discussed, Ito suggests for the search range wherein search range is the proximity search and the calculating of the longitude and latitudes for based on the search range (col. 4, lines 59-63 and col. 6, lines 59-64 to col. 7, lines 1-11).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ito et al. (US. Patent No. 6,223,520).

Regarding on claims 1, 15 and 27, Ito teaches a method of performing a proximity search, comprising the steps of:

(a) receiving at least one proximity parameter defining a search area encompassing a predetermined position (a form of the request is such that a range of the map data is designated as a rectangular range in latitude and longitude) (col. 4, lines 60-61; and

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(c) comparing (compare before retrieve) the set of latitudes and longitudes to position field information in a plurality of records stored in a database (only the map data which exist within a rectangular range are read out and output) (col. 5, lines 25-27).

Ito does not explicitly teach (b) calculating a set of latitudes and longitudes approximating the at least one search area based on the proximity parameter. However, Ito teaches, "when a user of the navigation system requests position computation, the navigation function section 12 outputs a request for map data to be used for the position computation to the data access section 14. The position computation is specifically that after the assessment of a location of vehicle detected by a GPS or the like, superimposed displays of the location of vehicle perform. To designate, for example coordinates at the bottom left-hand corner (latitude and longitude) and at the top right-hand corner (latitude and longitude) of a rectangular range similarity to the first embodiment is one of the forms of the requests made by the navigation section 12 to data access section" (col. 6, lines 59-65 and col. 7, lines 1-3). This teaches calculating the latitudes and longitudes position of the car in order to retrieve the display map. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include calculating the latitudes and longitudes position in order to retrieve the map to determine the location of the user in order to request the destination of the reference to the current location.

Regarding on claims 2, 16 and 28, Ito teaches determining which of the position in plurality of records is within the search area base on step (c) (col. 5, lines 25-30).

Regarding on claims 3, 17 and 29, Ito teaches at least the proximity parameter is a search radius defining a circular search area center around the predetermined position, and wherein step (b) further comprises the step of calculating the set of latitudes and longitudes to define a smallest square search area into which the circular search area can fit (col. 6, lines 59-65).

Regarding on claims 4, 18 and 30, Ito teaches the position information in the plurality of records includes a latitude and a longitude associated with a position (col. 6, lines 59-65), and

Wherein the smallest square search area covers a latitude range and a longitude range corresponding respectively to a height and a width of the smallest square search area, the height and the width corresponding to a distance equal to at least twice at least one the proximity parameter (col. 6, 59-65), and

Wherein step (c) comprises respectively comparing the latitude and the longitude associated with the plurality of records to the latitude rang and the longitude range covered by the smallest square search area to determine which of the position information plurality of records is within the smallest square search area (col. 9, lines 59-65).

Regarding on claims 5, 19 and 31, Ito teaches calculating (calculating) respective latitudes and longitudes of a least first, second, and third corner of the smallest square search area, wherein the latitude range extends between the latitude of the first and the second corners of the smallest square search area and the longitude range extends

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between the longitudes of the second and the third corners of the smallest square search area (calculating position including the longitude and longitude) (col. 6, lines 59-65).

Regarding in claims 6 and 20, Ito teaches calculating (calculating position) the latitudes and the longitudes of at least the first, the second, and the third corners of the smallest square search area, wherein the first, the second, and the third corners of the square area, wherein the first and second corner are at a same longitude but different latitudes and the second and the third corners are at a same latitude but different longitudes (col. 6, lines 59-65).

Regarding in claims 7 and 21, Ito teaches calculating an angular width of the smallest square search area, the angular width being subtended by at least the width of the smallest square search area (col. 6, lines 59-65); and

Calculating an angular height of the smallest square search area, the angular height being subtended by at least the height of the smallest square search area (col. 6, lines 59-65).

Regarding on claims 8 and 22, Ito teaches predetermined position has a latitude and a longitude, and wherein the step (b) further comprises the steps of:

Calculating (calculating) respective latitudes for the first, the second and the third corners using the predetermined position latitude and the angular height of the smallest square search area (col. 6, lines 59-65); and

Calculating (calculating) respective longitudes for the first, the second and the third corner using the predetermined position longitude and the angular width of the smallest square search area (col. 6, lines 59-65).

Regarding on claims 9 and 23, Ito teaches step (a) comprises the step of receiving an information request associated with the predetermined position and the at least one proximity parameter (user location is predetermined location) (col. 9, lines 59-65).

Regarding on claims 10 and 24, Ito teaches (e) sending a search result (data map) based on the records associated with position information determined to be within the smallest square search area at step (c), to fulfill the information request (col. 6, lines 59-60).

Regarding on claims 11 and 25, Ito teaches step (b) further comprises calculating the circular and the smallest square search areas using non-planar geometry (col. 6, lines 59-63).

Regarding on claims 12 and 26, Ito teaches step (b) further comprises calculating the circular and the smallest square search areas using planer geometry (col. 6, lines 59-63).

Regarding on claim 13, Ito teaches a method of performing a proximity search, comprising the steps of:

(a) receiving at least one proximity parameter (user location including longitude and longitudes) defining a first search area encompassing a predetermined position (user location) (col. 6, lines 28-39);

(b) mapping the first search area to a second search area positioned to encompass the first search area based on the at least one proximity parameter and being defined in terms of a set of latitudes and longitudes (col. 9, lines 55-39) ; and comparing (compare before outputting) the set of latitudes and longitudes to position information in a plurality of records stored in a database to determine which of the plurality of records include the position information within the second search area (outputting a request map data) (col. 6, lines 59-62).

Ito does not explicitly teach mapping the first search area to second search area positioned to encompass the first search area. However, Ito teaches, "a range of the map data to be read out by the data access section 14 for the data section 22. In the drawing, the area 1, 2...are area segments of the map data recorded in the data section 22 of the recording medium 20 and are also segments which rely on a recording format of the recording medium 20. Further, if a point A and point B are locations which corresponding to latitude and longitude designated by the navigational function section 12, a rectangular rang of the map data request by the navigation function section 12 is a range shown by a numeral 100" (col. 5, lines 16-27). This teaches Ito employs mapping in order to retrieve the data map based on the request locations of A and B. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to employing mapping utility in order to retrieve the information from the database based on the requested information.

Regarding on claim 14, Ito teaches at least one the proximity parameter (longitude and longitudes of the user location) is a search radius defining a circular

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search area centered around the predetermined position, and wherein step (b) comprises mapping the circular search area to a smallest square search area into which the circular search area can fit (col. 9, lines 59-65).

Regarding on claims 32-35, Ito teaches the at least one proximity parameter is a single proximity parameter (col. 4, lines 59-63)

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Biswas et al. (US. Patent No. 6,594,666 B1)	Patent date: 07/15/2003.
Barbari (US. Patent No. 5,532,838 B1)	Patent date: 07/02/1996.
Behr et al. (US. Patent No. 5,808,566)	Patent date: 09/15/1998.
Tani et al. (US. Patent No. 6,346,980 B1)	Patent date: 02/12/2002.

Contact Information

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at (703) 305-9790.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231.


The fax numbers for the organization where this application or proceeding is assigned are as follow:

(703) 872-9306 [Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II
2121 Crystal Drive
Arlington, VA 22202
Fourth Floor (Receptionist).

Baoquoc N. To
June 10, 2004


JEAN M. CORRIELUS
PRIMARY EXAMINER